C. M. A. DEPARTMENT OF PUBLIC RELATIONS

An open forum for progress notes on the department's activities, and for brief discussions on medical economics. Correspondence and suggestions invited. Address Walter M. Dickie, Room 2039, Four Fifty Sutter Street, San Francisco. This column is conducted by the Director of the Department.

Current Trends in Medical Practice*

By R. G. LELAND, M. D.
Chicago, Illinois

Of recent years the subject of economics has been given increasingly greater attention by the medical profession. At one time it was impossible for physicians in some parts of the country to arrange meetings for the purpose of discussing medical economics; it was considered unethical to discuss such matters. Times have changed, and at present there is some danger that economic questions may be influenced by emotion rather than by careful thinking. Not more than a half century ago medicine was practiced largely by the use of the five senses, plus whatever instruments or medicaments the physician could carry in his handbag. A suitable history and a careful physical examination were considered all that was essential in making a medical diagnosis. The temperature was taken by placing the hand on different parts of the body. Fifty years ago, and perhaps even more recently, the sense of smell was used extensively to determine the presence of exanthemata.

The next change in medical practice was a definite shift from the five senses to the various kinds of laboratory technique. As the laboratory period became established all of the cells, tissues, secretions and excretions of the human body were subjected to laboratory examination or microscopic study. The next development to assist diagnosis and treatment was the x-ray, which opened to human observation the hidden cavities of the body. Before that time physicians could listen to the râles within the chest, but with the advent of the x-ray they could see the pathology which was responsible for the râles. As the various perfections of roentgenology were marshaled into the practice of medicine, and as the numerous processes of laboratory technique were developed, the five senses of the earlier practitioners were not only magnified but they were extended, and they were increased a thousandfold, so that it became easy to make a diagnosis, and diagnoses were perhaps in some instances much more accurate.

As a result of these scientific advances knowledge accumulated so rapidly and in such vast amounts that it became impossible for any single physician to know and apply all these refinements in his private practice. We find the general practitioners of earlier times becoming the specialists of today. The first specialists were developed in the field of eye, ear, nose, and throat. In 1925 there were approximately 15,000 specialists of all kinds; in 1928 there were 18,000; and in 1930 there were 40,000. In 1915, 30 per cent of all graduates were becoming specialists; in 1920, 51 per cent of all graduates were limiting themselves to specialities; today three-fourths of all the students in medical schools decide some time during their junior or senior years the specialty they are to practice when they become licensed.

When roentgenology and certain of the newer methods of diagnosis were developing, the equipment for such work was very cumbersome and very costly. It was then necessary that patients be taken to the equipment, in order that the benefit of these newer methods might be secured. Now such equipment is greatly improved and much of it is easily portable so that it can be taken to the home or sickroom. The former practice has thus been reversed.

From 1900 to 1930 there was an increase in hospitals from more than 1,000 in 1900 to more than 7,000 in 1930. In 1900 there were 421,000 hospital beds; in 1930 there were 950,000 hospital beds. In 1920 there were 3,000 clinical and x-ray laboratories for the purpose of reducing the stay in the hospitals; in 1930 they had increased that to 4,000. In 1920 there were 2,500 x-ray laboratories connected with hospitals; in 1930 there were 5,000 x-ray departments in hospitals. A few years ago 90 per cent of all cases of disease were treated by the general practitioner. Fifty-five per cent of these were treated in the home; 35 per cent in the physician's office, and only 10 per cent were treated in the hospital. Now, more than 100,000 physicians in the United States have some kind of hospital connection or affiliation. It is believed that 90 per cent of all cases of disease can still be treated by the general practitioner with the amount of equipment that he can carry in his handbag; but the remaining 10 per cent require all of the newer methods and refinements of diagnosis and therapeutics, and all of the skill that the modern physician can bring to bear upon the case.

During the period of less than half a century the practice of medicine has changed from an individual, independent, general practice, chiefly, to a practice in which the specialist is rapidly becoming, if he is not already, the dominant figure or limited practitioner.

Much has been said and written in recent years concerning the quality of medical care received by the various classes of the population. The population has been divided, perhaps arbitrarily, according to income, namely, the rich, the poor, and the so-called middle class. It is claimed that the rich receive the best of medical care and that the large class of working people, whose income is small, find it extremely difficult to get the type and quantity of medical care which they deserve and need. Although we must admit that good medical care is essential to happiness, and should be available for what the individual can afford to pay, it is necessary to make a distinction between good medical care, or that which is necessary and appropriate for the particular case, and the best medical care. The best medical care may never be available to all the population at all times for the amount they can afford to pay. It must be admitted that it is not always necessary to apply all of the methods of diagnosis and treatment to a particular case. It seems, then, that we should rather strive toward that time when all of the people will receive the best care that can be furnished for the amount they can afford to pay. Perhaps this can best be illustrated by the cost of railroad transportation. One can buy a railroad ticket that will take him from New York to San Francisco safely, the thing which he expects it to do. If he buys a coach ticket, it will be necessary for him to sit up all the way. With a little more money he can buy a tourist ticket, which will give him more comfortable accommodations. For still more money he can buy a Pullman ticket that will provide a berth in which to sleep. Or if he wishes to pay the price he can buy a compartment or a drawing-room. If he desires to get to his destination more quickly and is able to pay the fare, he may travel by air transportation. Any one of these means will take him from New York to San Francisco safely, but for increasing degrees of comfort or luxury and saving of time he must invest more money.

* From the office of the Bureau of Medical Economics, American Medical Association. Reprinted from the Journal of the Indiana State Medical Association, June 1, 1933.

There have been many experiments during the last few years in methods of administering medical care. Many communities are now supporting some forms of medical practice which are recognized by those competent to judge as unsatisfactory, inadequate, and not economically sound. For example, there are: lodge practice, mutual benevolent associations, insurance schemes of various kinds (although they are not always labeled as insurance schemes), and flat rate monthly schemes for medical care that have been developed by newspapers, by medical groups, by county medical societies, by individual physicians, and others.

The practice of medicine represents a division of labor in the general economic system. It has for its object the protection of public health. Although it has become a fairly distinct entity as compared with other members of the economic order, it always has been more or less influenced by those factors which influence all branches of general economics. It has been charged that the medical profession should perfect some method by which the people of the country can secure at all times adequate medical service regardless of their ability to pay. To make such a charge is both unfair and unreasonable. The medical profession of the United States consists of about 15/10000 of the entire population. The medical profession has practically no controlling influence over employment, industry, marketing, business, banking, the value of foreign credits and other general economic factors, all of which influence the degree to which the population in general has the ability to buy medical service.

Medical practice, as the general economic trends change, will undoubtedly undergo some change, but it is necessary for county medical societies to decide whether a change in medical practice is necessary in their respective communities. Change, for the sole reason of practicing medicine in a different way, is never worthy.

The type of medical practice which is to evolve from the present situation lies very largely, if not entirely, in the hands of the medical profession. It is not enough for medical men to read articles, to go to organization meetings and hear talks and then to return to their homes and say and do nothing more about it. The future of medicine lies within the hands of every physician. It is not alone the responsibility of the American Medical Association; it is not alone the responsibility of the officers of your State Association; it is not alone the responsibility of your county organizations. It is the responsibility of every member of organized medicine to know the trends in medicine today, to know tendencies toward contract practice, toward health insurance, and toward every other method which has for its object the exploitation of both the public and the profession for the profit of lay promoters and lay organizations.

In times of economic stress there is always a demand for change. Whether this demand is made of the medical profession or of other members of the economic order the question should always be asked whether the change that is demanded will bring to the organization or to the public advantages that are greater than those which the change supplants.

Before accepting any of the new systems of medical practice a careful examination of the schemes is necessary. Are these new systems of medical practice better for the public and the individual than the type of medicine which is being practiced today? Is the medical profession, in accepting a change, lowering its standards of quality of care? Are the proposed changes based primarily upon financial or economic distress, or are they based upon better service to the sick individual? Will the newer types of medical practice result in a more unified and coherent medical organization, and are these new types of medical practice to be controlled by the medical profession? Unless these questions can be answered satisfactorily for the good of the public, the profession is not justified in endorsing or entering upon any particular new plan.

The hope of solving the present problem of medical care lies, first, in carefully planned and exhaustive studies, conducted without prejudice and without preconceived ideas or bias of any kind. It is necessary that every physician participate in this work to some extent. Not until facts are available upon which it can act intelligently is the medical profession justified in admitting that a change in medical practice is necessary.

CANCER COMMISSION*

REPORT OF COMMITTEE ON SKIN AND MOUTH TUMORS

Part I. Keratoses

PREAMBLE

A consideration of cancer of the skin would be somewhat incomplete if it did not also embrace the keratoses. The latent possibilities of these fairly common lesions should be the more emphasized inasmuch as some attach little importance to them. They apparently fail to realize that these lesions, painless, of small significance clinically, and often complained of only because of their unsightliness, may eventually develop into skin cancer in its most serious form. These lesions, not definitely epitheliomatous, yet so often prodromic of cancer as to be considered by some authorities part of the same phenomena, will be considered first.

I. KERATOSIS SENILIS

This condition occurs in individuals of and beyond middle age. It may be found in earlier years in those who are subject to inclement exposure—sailors, railroad men, etc. The areas most commonly involved are the face, ears, neck, and dorsum of the hands. They manifest themselves mainly as flat, slightly elevated, irregularly shaped patches composed of adherent crusts or scales, yellowish brown to dark brown and even blackish in color. The crusts may be greasy, but are usually dry and hard. When removed their undersurfaces often show horny prolongations which fit into the small cavities which remain. Their removal will often be followed by bleeding; if not, the undersurfaces are moist and reddened and bleed easily.

Flat, seborrheic keratoses or warts should readily be differentiated from the above, with which they are sometimes confused. These latter have different clinical features, different distribution (as on the trunk), and do not tend to develop into epitheliomas.

Treatment: Any method resulting in destruction of the lesion is acceptable—freezing with carbon dioxid snow, electrodesiccation, cautery, curetting with cautery of base, etc.

2. LEUKOPLAKIA

This is considered a keratosis of the mucous membrane, a syndrome due to various causes—a modification of the epithelial tissue due to toxic, vascular or artificial irritations. The lips are most frequently involved, but this condition may be found on any part of the surfaces of the oral cavity. In considering leukoplakia it is well to remember the aphorism, "Look backward toward syphilis and forward toward malignancy." It may, with justification, be divided into the mild and the marked forms.

Mild Form.—This is characterized by spots or patches of various size and outline, smooth and bluish white in color. They are not much thickened, but may be

* The Cancer Commission was brought into being by the House of Delegates of the California Medical Association to aid in the furtherance of all efforts to combat cancer. The roster of officers and the central office of the Commission to which communications may be sent is printed in this issue of CALIFORNIA AND WESTERN MEDICINE (see front cover directory). This column is conducted by the Secretaries of the Commission.

very slightly raised, usually sharply marginated, sometimes the borders fading into the normal mucosa. These patches are quite adherent and cannot be peeled off without traumatizing the parts below. Occasionally small particles are desquamated. If situated on the lips, small fragments are usually either bitten off or pulled off by the patient.

Marked Form.—Usually the same patch will demonstrate varying stages from the above to where the thickening of the mucosa is quite marked. Hard, snow-white thick patches with sometimes roughened, but usually smooth surfaces firmly attached to the underlying tissues may be observed. As they become chronic, crevices may develop; patches may be desquamated out of the mosaic coverings only to be rapidly filled in again. Rarely ulcers and horny protuberances form, both of these conditions usually being the early prelude to epitheliomatous changes. The course of both types is very irregular, usually of definite though slow progress. It may persist through life in stationary form, or it may even subside and disappear; but is prone to recur. Some continental authorities place the frequency of epithelioma in leukoplakia from 30 to 40 per cent, but it must be recognized that mouth hygiene among the old world masses is an undeveloped art, and this may account for the extremely high incidence.

Treatment:

(*a*) Investigate the possibility of syphilis.

(*b*) Strict buccal hygiene (elimination of tobacco, alcohols, condiments, and spiced foods; cleansing and adjustment of all teeth; removal of all local irritants, including metallic fillings or crowns).

(*c*) The use of soothing and weak alkaline mouth washes.

(*d*) Marked form: Freezing, electrodesiccation or cautery are appropriate.

With regard to radiation for obstinate cases of leukoplakia, some difference of opinion was developed. Some members believed it advisable; the majority regarded it as ineffective and likely to be dangerous and to be used only in the presence of malignant change.

3. ULCERS

In general, it may be stated that simple chronic ulcers are not prone to develop into epitheliomas. There are, however, three main exceptions—the ulcers of leukoplakia areas, the ulcers of radiodermatitis, and ulcers in burn scars. All types usually eventuate as squamous cell epitheliomas. Such ulcers should be treated by radical destruction with electrodesiccation, electrocoagulation, or the actual cautery. Scalpel excision is in order if the whole area, including a generous margin of normal skin, can be removed. One member of the committee calls attention to the tendency of epitheliomata in old ulcers to metastasize slowly and to the consequent fact that adequate local excision will often accomplish cure without amputation. Radium should not be used in the treatment of lesions due to radiation necrosis.

4. SCARS

Cicatrices may occasionally become the starting point of cancer, especially the scars of extensive burns or those resulting from injudicious radiation exposure. When such cancers develop they are ordinarily of the squamous cell variety.

Part II. Epitheliomas

PREAMBLE

These result from an atypical proliferation of the epithelial structures of the skin. There are many clinical forms, some relatively benign, some malignant. There are two main types, one consisting of cells of the type seen in the basal layer of the epidermis and known as basal cell epithelioma, the other resembling the squamous layer and known as squamous cell epithelioma. There are many synonyms, but the above terms are adequate for our purpose and will be less misleading. The former type rarely metastasizes and is, comparatively, benign. The latter commonly metastasizes and is, therefore, relatively malignant. By "relatively" we mean that we are of the opinion that while the great preponderance of the squamous cell epitheliomas in their early stages are readily controlled by modern methods of procedure; some few of them, irrespective of how capably treated, tend to recur and metastasize. Although the above definite separation of the two types generally obtains, it sometimes happens that the one type merges with the other, producing what is known as the mixed type. In this variety the histopathologic evidence differs when taken from different parts of the same tumor, different slides showing dominantly the basal cell, squamous cell, or mixed characteristics. This emphasizes the necessity of making sections from different parts of the same tumor. Epitheliomas occur most frequently on the face and hands of elderly persons. Experience has demonstrated that most of those situated on the dorsum of the hands are of the squamous cell type. It was formerly believed that a particular distribution on the face was a fairly definite indication of type, but this assumption has recently been demonstrated to be unwarranted. Clinical types of epithelioma differ widely. The same type has also a variety of forms. Appreciation of these minor differences is gained by experience alone.

Clinically, epitheliomas may be flat and superficial, deep and nodular, papillomatous or fungoid.

Superficial Epithelioma.—This type usually originates in a keratotic thickening of the skin accompanied by redness, the surface beneath the crust then showing as a superficial ulcer which gradually develops the characteristics of an epitheliomatous ulcer; or it may demonstrate itself early as a pin-head to bean-sized, smooth, firm, waxy, translucent nodule, whitish in color, with fine blood vessels ramifying over it. It may remain for years unchanged in this state; there may be but one or several nodules grouped together. These nodules proceed quite slowly to ulceration when fresh nodules are formed, and it is due to this process that so many varying clinical pictures of the same entity may be produced. Crusts form on these ulcers which in turn are desquamated or removed by trauma, disclosing a large ulcer with each successive denuding. Attempts at cicatrization are apparent in most of them. In fact, some cases show a complete scar-like surface, with papules or nodules being found at the border only. These are, in the main, the superficial or basal cell epitheliomas, the slow nonmetastasizing forms.

Deep Epithelioma.—This form may originate in the superficial type or develop independently. In the latter instance it begins as a small firm nodule. It may be rounded or take the form of a plaque with lateral extensions into the surrounding and deeper tissue. These are of firm consistency, having a fairly characteristic feel. The surface is pinkish and usually has fine blood vessels ramifying over it. Ulceration may occur. The base and walls are definitely indurated, the floor usually irregular, and they may show papillomatous or fungoid growths, usually associated with a viscid hemorrhagic or purulent discharge; the edges may be everted or undermined, but in most instances are thickened and indurated. These ulcers extend more rapidly than the former type, both deeply and peripherally, causing at times no small degree of local destruction. If of the squamous cell type there is often involvement of the lymphatic glands with general metastases followed by a fatal termination.

We believe it impossible in many instances to differentiate clinically between the basal and squamous cell types. This in itself warrants biopsy, not only as a guide to scientific diagnosis, but as a means of guidance in therapeutic procedure. The question of the dangers attendant on biopsy is a moot one and is justifiably so, inasmuch as one has little data upon which to base one's opinions. However, the opinion is offered that the danger of dissemination of any vegetative cells within the few minutes necessary to

obtain frozen section findings is not great. Ideally, we believe that a biopsy should be done at the time of operation, but in actual practice an immediate frozen section is not demanded. It may be suggested that the best biopsy is an excision of the entire lesion when this can be done without mutilation. If radiation is contemplated for treatment of the lesion, it is recommended that biopsy be done after radiation therapy has been begun. Instead, one may destroy the lesion widely, including a wide margin of normal skin, and send a portion of the growth to the laboratory for classification later. The obvious mode of procedure, in the absence of any histologic data or in the presence of a definite degree of uncertainty, is the radical one. Opinions vary regarding the efficacy of histopathologic grading, and while we believe the method to be of value, we feel there is much to be desired from it even in the hands of experts, and one cannot be condemned for accepting a pathologist's prognosis with a certain degree of trepidation.

EPITHELIOMAS OF THE SKIN

Basal Cell Epitheliomas of the Skin.—The general characteristics of these growths have been mentioned above. They occur most frequently on the faces of elderly persons. Although they do not metastasize they may produce extensive local destruction and, hence, demand removal.

Treatment: They should be destroyed thoroughly by whatever method is best known to the individual operating. It is our opinion that the actual cautery, surgical excision, or radiation therapy are all reliable.*

Inasmuch as the purely basal cell epitheliomas do not metastasize, no therapy need be directed against the regional lymph nodes.

Squamous Cell Epitheliomas of the Skin.—The general characteristics of the lesions have been mentioned above. They are seen most frequently on the faces and dorsum of the hands of elderly persons and at the mucocutaneous junction. In contradistinction to the basal cell epitheliomas they quite commonly metastasize. Hence, treatment must not only be directed toward the local growth, but due consideration must be given to the regional lymph glands.

Treatment: Again, as in basal cell epitheliomas, there is difference of opinion as to best treatment, and alternate methods are apparently acceptable—radiation, cautery destruction, surgical excision. Destruction should be even more widespread, deep and radical. If the regional lymph glands are involved, they should be removed by block dissection. Preoperative and probably postoperative radiation should be given.

EPITHELIOMAS OF THE LIP

Whenever any fissure, ulcer, erosion or wart growth remains on the lip for a period longer than two to four weeks, one should suspect it to be malignant or potentially malignant.

Although basal cell epitheliomas do rarely occur on the lip (especially the upper lip), the hight percentage of lip cancers are of the metastasizing (squamous cell) type.

Treatment of local lesion: In general we hold to our principle that thorough removal or thorough destruction of the entire growth is necessary. The method of destruction which is to be used must be that with which the surgeon is most familiar. Electrocoagulation, actual cautery, thorough excision, or adequate radiation are standard procedures. Any of these methods will suffice for the control of the local growth if the removal is sufficiently radical.

Treatment of the lymph node extension:† Lymph gland dissection is a question of the greatest importance, and we recognize the opposing opinions of many clinicians. If the glands of the neck show definite involvement, but not to the degree of seeming hopelessness, we believe that radical neck dissection in conjunction with radiation therapy is in order.

If, on the other hand, there are no palpable glands we find ourselves in a dilemma. In such a case we believe that one can depend somewhat upon the degree of malignancy and the depth of invasion of the primary growth on the lip as judged by clinical and laboratory standards.

The following method of solving this problem is suggested. No biopsy is to be done until the patient is on the table ready for operation. A generous portion of the tumor is removed for immediate frozen section. Depending upon the pathologist's report and upon the clinical findings, one must decide as to his procedure in regard to the glands of the neck. If the lesion is superficial and nonindurated, and if the pathologist reports it to be of a low grade of malignancy, dissection of the glands may be omitted, but if induration is present, plus involvement of the muscle and a high degree of malignancy is determined on frozen section, the glands should be removed by block dissection. Pre- and postoperative radiation would seem to be in order. Where preoperative radiation has not been given, those cases that have had glandular involvement should have postoperative.†

Some members of the committee felt that no dissection of the neck should be undertaken in those cases in which no glands can be felt. If glands can be felt in the neck, then a block dissection of the neck is carried out, either preceding removal of the growth in the lip by one or two days or at the same time.

EPITHELIOMAS OF THE TONGUE

Although practically all cancers of the tongue are of the squamous cell type, and all highly malignant, there are two subdivisions which vary slightly in the degree of malignancy. There is a deeply destructive infiltrating type which produces craterform ulcers. This type is particularly malignant. The other type is more productive of papillomatous and warty growths which arise above the surface of the tongue and, although highly malignant, has a better prognosis than the destructive type.

Treatment: In our opinion, radical destruction of the growth by means of the actual cautery or electrocoagulation, or competent treatment of the entire involved area by means of interstitial radiation, is preferable to surgical excision. If the growth is very large, radium implants in the form of needles or seeds will serve to shrink it down and furnish a palliation. In certain cases a combination of radium and other destructive measures may seem to be in order. If the growth seems inoperable, radium should generally be used because of its marked palliative action.

The neck is not dissected unless glands are felt. If glands are palpable, block dissection of the neck should be done. Preoperative radiation should be given. It is often advisable to ligate one or both external carotid arteries.

PIGMENTED MOLES AND MELANOMAS

Solitary, blue-black moles should be removed by one skilled in this work. Incomplete removal is condemned. Removal should be by wide surgical excision.‡

* Note by Cancer Commission.—Difference of opinion, apparently irreconcilable, exists on this point. Some of the members of the Dermatology Committee insist that electrodesiccation is the method of choice. On the other hand, the Radiology Committee's report, previously published, pointed out that the great majority of basal cell epitheliomas are highly radiosensitive, and in the absence of bone or cartilage involvement, this method of treatment usually results in cure and is preferable, therefore, to surgical or electrocoagulation methods, except in the occasional radio-resistant lesion.

The Cancer Commission calls attention to this diversity of opinion without indorsing or condemning either method to the exclusion of the other.

† Note by Cancer Commission.—For additional discussion of treatment of lymph-gland area in lips and mouth cancer, see Appendix, also report of Radiology Committee.

‡ Note by Cancer Commission.—It has been suggested that massive (cauterizing) radiation has destroyed these lesions. (See report of Radiology Committee.) The Cancer Commission believes, however, that wide surgical removal is the safest procedure.

Appendix

LYMPH GLANDS IN CANCER OF LIP AND MOUTH

Sharp and irreconcilable difference of opinion arose in committee discussions over the proper procedure to be followed regarding the lymph-node bearing area in epitheliomata, especially of the lip. It was possible to reach agreement that, in general, surgical resection, radiation or cautery destruction of the primary lesion in lip cancer are equally safe methods. Men who preferred one method agreed, nevertheless, that other methods are acceptable.

Upon the question of whether dissection of the neck should be performed *in the absence of palpable metastatic glands,* it was impossible to reach agreement.

The Commission, therefore, undertook to ascertain the present-day practice of authorities throughout the world.

Of forty inquiries sent out to surgeons, radiologists, dermatologists and cancer clinics throughout the world, thirty were answered. The replies have been tabulated and a summary shows that there is a disagreement throughout the world corresponding to that appearing in California. The question is one remaining to be settled.

From the replies obtained the following is summarized:

(*a*) In the presence of cancer of the lip of sufficient size, duration or microscopic evidence of deep invasion to suggest possible metastasis, two-thirds of the correspondents (twenty) do not do dissection of the lymph glands if none are palpable, while one-third (ten) dissect the neck without waiting for gland enlargement.

(*b*) Of the group maintaining a conservative attitude (not dissecting the neck in the absence of gland enlargement) approximately two-thirds (fourteen versus six) give prophylactic radiation to the neck. This is done either by x-ray or radium pack or a combination.

In general a similar divergence of practice holds for cancer of the tongue and buccal mucous membrane. A detailed study of the replies received will be the subject of a separate communication to be published later.

COMMITTEE ON SKIN AND MOUTH TUMORS.

H. Sutherland Campbell, Chairman	Harry E. Miller
	William Ophüls*
H. J. Templeton, Secretary	Charles E. Schoff
	George S. Sharp
Harry E. Alderson	Henry J. Ullmann
Stanley O. Chambers	Stuart C. Way
Leo Eloesser	Louis F. X. Wilhelm

* Deceased.

Cancer Producing Substances.—It was announced last year that a pure chemical substance, dibenzanthracene, a synthetic product, had been found to possess powerful carcinogenic properties so that, when applied to mice, it caused cancer with considerable frequency. One of the dibenzanthracene series—namely 1:2:5:6—dibenzanthracene, provide to be the most potent cancer-producing substance so far encountered. This substance dissolved in fats has been used, successfully, to produce connective tissue tumors and sarcomata in rats and mice and is being tried on a variety of other animals. Subcutaneous injections in lard have caused spindle-celled sarcomata in thirty-one out of a total of ninety-three mice and in fifteen out of a total of sixty-seven rats. These tumors are true sarcomata and can be passed on by grafting into other rats or mice. In some cases the tumors have now reached as many as thirty-seven generations. The reaction of different animal tissues to tumor production is one of the subjects upon which this work may be expected to shed light.—Ninth Annual Report, British Empire Cancer Campaign, 1932.

Drugs in Cancer.—There is no scientific and medical evidence to show that any drug or combination of drugs will cure cancer. A radio talk delivered recently by Lord Moynihan, one of the world's leading cancer specialists, and president of the Royal College of Surgeons, England, against quackery in the sale and promotion of alleged cancer "cures" is worthy of repetition at this time in the United States. The British surgeon declared:

"The cancer curer is still a curse in every land, and the most pathetic credulity as to his claim is shown by people who should know better."

When taken in the early stages, cancer may be cured by surgical treatment. But the Food and Drug Administration is convinced that the sale of so-called cancer "cures" results not only in economic loss to the buyer, but, and far more important, may give the purchaser a false sense of security at a time when immediate action must be taken if the disease is to be cured.

In twenty-four years' regulatory operation of the Federal Food and Drug Act the Administration has instituted more than seventy court actions against more than forty so-called cancer "cures." In the rare instances where such fakes enter interstate commerce today the Government takes immediate legal action under the law.—United States *Daily,* April 1, 1932.

Protection by "Mustard Gas."—It was noted some time ago that "mustard gas" seemed to possess a power of retarding the production of cancer by these and other carcinogenic agents. Work has been proceeding in this field. It has now been established that a 0.05 per cent solution of mustard gas applied to the skin of mice who were being treated with dibenzanthracene entirely prevented the appearance of tumors. As the applications of the mustard gas were not made synchronously with the applications of dibenzanthracene the possibility of a chemical effect upon the carcinogenic agent can be excluded. The conclusion is therefore suggested that mustard gas exerts a biological effect on the body cells whereby, in some curious and unknown manner, the effects of the cancer producing substance are counteracted. It should be noted that whereas all the mice, with a single exception, which had been used as "controls" in these experiments (that is to say had remained untreated) developed tumors, no tumor appeared in the case of the mice treated with dibenzanthracene and mustard gas. —Ninth Annual Report, British Empire Cancer Campaign, 1932.

Foundation for Cancer Research.—William H. Donner, retired steel manufacturer of Villanova, Pa., has established a fund of $2,000,000 for the furtherance of cancer research on a world-wide basis, to be known as the International Cancer Research Foundation. Mr. Donner stipulated that the fund should not be used to erect new buildings or laboratories, but to assist scientists to develop new theories and new research workers and to increase general interest in the cancer problem. The income of the fund is to be distributed to institutions throughout the world, not more than 35 per cent to any one and not more than from 50 to 60 per cent within the United States. Mr. Donner, who established the fund because of the death of a son in 1929, will act as president; Thomas S. Gates, LL. D., president of the University of Pennsylvania, Philadelphia, is vice-president, and the directors are Edward D. Weidlein of Mellon Institute for Industrial Research, Pittsburgh, and former Senator George Wharton Pepper, Philadelphia.—*The A. M. A. Journal,* July 2, 1932.

How necessary health is to our business and happiness, and how requisite a strong constitution, able to endure hardship and fatigue, is to one that will make any figure in the world is too obvious to need any proof (John Locke, 1690).—*Weekly Bulletin, California Department of Public Health.*

STATE MEDICAL ASSOCIATIONS

This department contains official notices, reports of county society proceedings and other information having to do with the state associations and their component county societies. The copy for the department is edited by the state association secretaries, to whom communications for this department should be sent. Rosters of state association officers and committees and of component county societies and affiliated organizations, are printed in the directories noted under Miscellany, on the front cover index.

CALIFORNIA MEDICAL ASSOCIATION

GEORGE G. REINLE.....President
CLARENCE G. TOLAND.....President-Elect
EMMA W. POPE.....Secretary-Treasurer

OFFICIAL NOTICE

The fall meeting of the Council of the California Medical Association will be held in Los Angeles in September, the date to be published later.

COMPONENT COUNTY MEDICAL SOCIETIES

IMPERIAL COUNTY

The regular June meeting and dinner of the Imperial County Medical Society was held on June 20 at the De Anza Hotel, in Calexico. After dinner the meeting was called to order by Doctor Parker, and a short business meeting ensued. A resolution was passed that the next regular meeting, Tuesday, September 3, be held in Brawley.

Doctors Barmore, Minna, and Kortheur of Calexico were accepted as new members.

Dr. Julian Cohn of Los Angeles presented a paper on *Newer Treatment of Hay Fever* that was much enjoyed and discussed by the members. Following this, motion pictures of Kanavel's *Diagnosis and Treatment of Infections of the Hand* were shown and enjoyed.

The society was then adjourned, to meet again in September, after the customary summer vacation.

GEORGE C. HOLLERAN, *Secretary.*

SAN JOAQUIN COUNTY

The stated meeting of the San Joaquin County Medical Society was called to order at 8:15 p. m. by Dr. J. F. Doughty, president, Thursday, June 1, in the Medico-Dental clubrooms, 242 North Sutter Street, Stockton.

A letter from Mrs. M. E. Mack concerning a proposed colony for tuberculous patients was read. Doctor Dozier moved that the matter be laid on the table. Seconded and carried.

Dr. Dewey Powell moved that, considering the nature of the program to be presented at this evening's meeting, all matters issued for publication be left to President Doughty or persons designated by him. Seconded and carried.

The paper of the evening was read by Dr. Harry E. Kaplan under the title, *The Preliminary Report of the Committee on Social Problems.*

Dr. G. H. Rohrbacher moved that this report be accepted as read and the committee be empowered to proceed to put their plans into action. The motion was seconded and carried unanimously.

Dr. L. Dozier moved that the Advisory Committee be empowered to disseminate this report to their contacts or as they may see fit. This motion was seconded and brought out considerable discussion, but was finally carried unanimously.

There being no further business the meeting adjourned and refreshments were served.

C. A. BROADDUS, *Secretary.*

CHANGES IN MEMBERSHIP

New Members (16)

Fresno County.—Elizabeth Ann Leggett.

Imperial County.—John B. Minna.

Los Angeles County.—Arthur G. Daniells, Jr., L. L. Jones, Charles LeRoy Haines, Thomas Francis Joyce, Bernard S. Pearson, John Conrad Redell, Jason Guild Wood.

Riverside County.—Emory Clement Boess.

San Bernardino County.—Edward Ewald Engel.

San Diego County.—S. D. Aiken, John R. Beardsley, J. Terrell Scott.

San Francisco County.—Jesse L. Carr.

Santa Barbara County.—G. Horace Coshow.

Transferred (4)

Joseph B. Blackshaw, from Contra Costa to Alameda County.

Robert M. Furlong, from San Francisco to Marin County.

D. Schuyler Pulford, from Yolo to Sacramento County.

Milton H. Saier, from San Francisco to Santa Clara County.

Resigned (3)

Mary R. Butin, from Fresno County.

Charles F. Mills, from San Luis Obispo County.

Arthur E. Serns, from Santa Barbara County.

In Memoriam

Dickson, George Gillespie. Died in Los Angeles, June 27, 1933, age 47 years. Graduate of College of Physicians and Surgeons, Los Angeles, 1918. Licensed in California, 1918. Doctor Dickson was a member of the Los Angeles County Medical Association, the California Medical Association, and a Fellow of the American Medical Association.

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Dray, Frank Raymond. Died in San Francisco, June 24, 1933. Graduate of Harvard University Medical School, Boston, 1898. Licensed in California, 1898. Doctor Dray was a member of the San Francisco County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

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Russell, Tracy George. Died in San Francisco, June 18, 1933, age 60 years. Graduate of Columbia University College of Physicians and Surgeons, New York City, 1899. Licensed in California, 1900. Doctor Russell was a member of the San Francisco County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

THE WOMAN'S AUXILIARY TO THE CALIFORNIA MEDICAL ASSOCIATION*

Component County Auxiliaries

Los Angeles County.—The Woman's Auxiliary to the Los Angeles County Medical Association had a brilliant gathering this month, the last meeting until October, with Mrs. A. Bennett Cooke, president, presiding. The luncheon meeting was held in the banquet hall of Ebell Club. Dr. Frederick D. Woellner, Ph. D., professor of education, University of California, Los Angeles, known for his humor and wisdom, was the guest speaker of the afternoon. His subject was *Civic Significance of Health.* He said no man can do his work and "stand the gaff," the impact of a critical public and meet it with ingenuity and creativeness unless the body resistance is sound. Society must keep down the many diseases assailing humanity—tuberculosis, social diseases, all infectious and contagious diseases.

Sleep, perfect relaxation, diet, and interest in work make for resistance to disease. It is not things themselves that get our "royal Angora," but our attitude toward things. We must be capable of adjusting our lives to new situations, must have interest in our work and in life's purposes, and keep stimulated and refreshed along the way. A sense of humor keeps one relaxed, and is a great balm. Doctor Woellner says, "Something is wrong with civilization when only the pretzel maker or the stockbroker can make a fortune. The public must be educated to the knowledge that health is a social problem, not an individual one. Only that individual is healthy whose mind, soul, and body are in harmony with the Cosmos."

Mrs. Shiftbougher, chairman of Current Events, introduced Mr. W. B. Wright, who gave a most interesting book review on "100,000,000 Guinea Pigs."

Mrs. Cooke introduced as guests of honor Mrs. Samuel Cary Dunlop, president of the Ebell Club, and Mrs. Louise Ward Watkins, president of the Friday Morning Club of Los Angeles, and Mrs. Austin of Bakersfield.

An interesting letter from Mrs. James F. Percy, national president of the Woman's Auxiliary, was read. Mrs. Percy wrote from Milwaukee, where she was attending the American Medical Association.

A letter from Mr. Ben Reed of the Public Health League was read in which he expressed appreciation for the Woman's Auxiliary.

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San Diego County.—The regular meeting was held at the home of Mrs. W. H. Geistweit, Jr. The treasurer's report showed a balance of $278. This included $75 from a benefit bridge tea, but as all bills are not in yet, the final balance cannot now be stated. The bridge tea was given on June 6 for the benefit of the Crippled Children's Society, particularly to assist in building up a reserve for treatment of infantile paralysis.

Members were urged to visit VauClain Home, the home for the tuberculous in connection with the County Hospital. The president, Mrs. Charles E. Howard, reported one such visit. Dr. S. A. Parowski, speaker at the May meeting, had inspired interest in the home. Mrs. E. F. Birkenstock gave a concise and interesting summary of recent happenings in the medical world.

Dr. Harry C. Steinmet, professor of psychology at San Diego State College, gave a very stimulating talk, based on the book "Our Neurotic Age." Considerable discussion was provoked by the talk.

Members were urged to inform the Courtesy Committee during the summer of any ill members in order that flowers may be sent and calls made. The Auxiliary adjourned until September. A delightful tea hour followed.

HARRIET L. COLBY, *Secretary.*

* As county auxiliaries to the Woman's Auxiliary to the California Medical Association are formed, the names of their officers should be forwarded to Mrs. Thomas J. Clark, chairman of the Publicity and Publications Committee, 40 Ross Circle, Oakland. Brief reports of county auxiliary meetings will be welcomed by Mrs. Clark and must be sent to her before publication takes place in this column. For lists of state and county officers, see advertising page 6. The Council of the California Medical Association has instructed the editor to allocate one page in every issue for Woman's Auxiliary notes.

Mercurochrome and Iodin as Disinfectants.—Simmons treated skin abrasions, superficial incisions and deep incisions, contaminated with undiluted broth cultures of either *Staphylococcus aureus* or *Streptococcus pyogenes,* for various periods of time with solutions of iodin and mercurochrome, respectively. Application of tincture of iodin to 151 wounds contaminated with staphylococci resulted in sterile cultures as follows: abrasions, 83.4 per cent; superficial incisions, 83.1 per cent, and deep incisions, 31.2 per cent; while its use on 59 wounds contaminated with streptococci resulted in sterilization as follows: abrasions, 75 per cent; superficial incisions, 80.9 per cent, and deep incisions, 82 per cent. Of the 210 contaminated wounds treated with tincture of iodin, the cultures from 156, or 74.2 per cent, were sterile. Mercurochrome used under similar conditions caused relatively little reduction in the numbers of viable test organisms and failed to sterilize any of the 210 wounds. Mercurochrome is comparatively so ineffective in the sterilization of contaminated living tissues that it should not be considered as a substitute for iodin.— *Surgery, Gynecology, and Obstetrics.*

Clinical Significance of Leukopenia.—Mettier and Olsan present five cases of severe leukopenia of obscure origin and call attention to the different types of bone marrow reaction occurring in the various cases, namely, aplasia of the bone marrow, depression of leukopoiesis only, hyperplasia of the leukopoietic tissue, and hyperplasia of the erythropoietic tissue. They also report a case of leukopenia associated with lymphangitis of the arm in a woman in whom recovery occurred during the course of the administration of nucleotide K-96. Among the 10,000 case histories of the patients cared for in the University of California Hospital from 1920 to 1931, examination of the blood revealed leukopenia in 1,167, or 11.67 per cent, of the cases. Of the 1,167 cases, leukopenia occurred in 611 females, or 52.4 per cent, and in 556 males, or 47.6 per cent. Leukopenia occurred frequently as a mild manifestation in patients with vague symptoms of one sort or another, such as chronic fatigue; 9.7 per cent of the cases of leukopenia were classified, therefore, as benign leukopenia of obscure origin. A table of the frequency incidence of leukopenia is given.—*Annals of Internal Medicine,* June, 1933.

Cold Quartz Light in General Practice.—Behneman gives a summary of the results of cold quartz radiation in eighty-one cases including sluggish ulcers, burns, endocervicitis, fistulas and rectal ulcers, Vincent's infection (trench mouth), acne, boils and carbuncles, nasal antrum disease with sinus involvement, and lesions of the urinary tract. He states the advantages of this type of generator as follows: It is within the wavelength of high germicidal action. It burns at a low temperature with possibilities of application directly to the skin. The orificial applicator has emission from its entire surface area. The grid lamp may be moved so that perpendicular ray exposure is possible at all times. Little erythema is evidenced for the radiation produced. There is a constancy of intensity. The handling and use are safe and convenient because of its light weight and detachability. There is usually a relatively low formation of pigmentation. There appears to be little of the red of the visible spectrum. It may be operated while in motion. The temperature at which it burns allows any design of applicator for insertion into body cavities.—*Archives of Physical Therapy.*